

# THE GEOGRAPHICAL MAGAZINE



JULY 1947

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# The Groundnut in World Economy

by N. R. FUGGLES-COUCHMAN and D. W. SCHOLES

*Those of our readers who have not yet identified the groundnut with the monkey nut or peanut will be enlightened and cheered by the following account of its importance from two members of the staff of the United Africa Company, which has been appointed by His Majesty's Government as the interim Managing Agency for a national investment of some £24,000,000 in groundnut production*

THE current interest in the groundnut, *Arachis hypogaea* (Linn.), like the current interest in whaling as examined in the February number of *The Geographical Magazine*, arises from the present and anticipated world shortage of vegetable oils and animal fats.

The causes of this shortage may briefly be divided into the factors which have reduced or limited the world production of oils and fats and those which have increased the consumption of these commodities, especially in the more backward areas of the world.

Among the former, the direct effects of war, with the destruction of tropical plantations and of whaling fleets, and of herds and crops in more temperate zones, together with the disruption of transport facilities both by land and sea, must take first place. The indirect effects of war—shown in economic dislocation and political disturbances—are today hindering the rehabilitation of vast producing areas in the Far East, as the recent history of China and the Netherlands East Indies shows only too clearly.

Of the factors affecting consumption, the most potent is the vast growth in the world's population during the past decade, which has been estimated at some 125,000,000 additional souls. Another factor not so apparent has played, however, an increasingly important part in this relentless pressure upon diminishing world resources. This is the heavy increase in consumption per head of population, which inevitably accompanies the efforts now being made to raise the standard of living of the more primitive peoples, particularly of the Far East. A measure of the pressure that may yet be exerted upon the world's supplies is the fact that the consumption of oils and fats in India is estimated at 9 lb. per head as compared with the present figure of 62 lb. consumed in the United States of America.

Furthermore, the full employment policies now being adopted by the more advanced

countries is placing increased purchasing power in the hands of those sections of the community formerly at a disadvantage, thereby encouraging the adoption of a more varied diet and a still higher consumption of health-giving oils and fats.

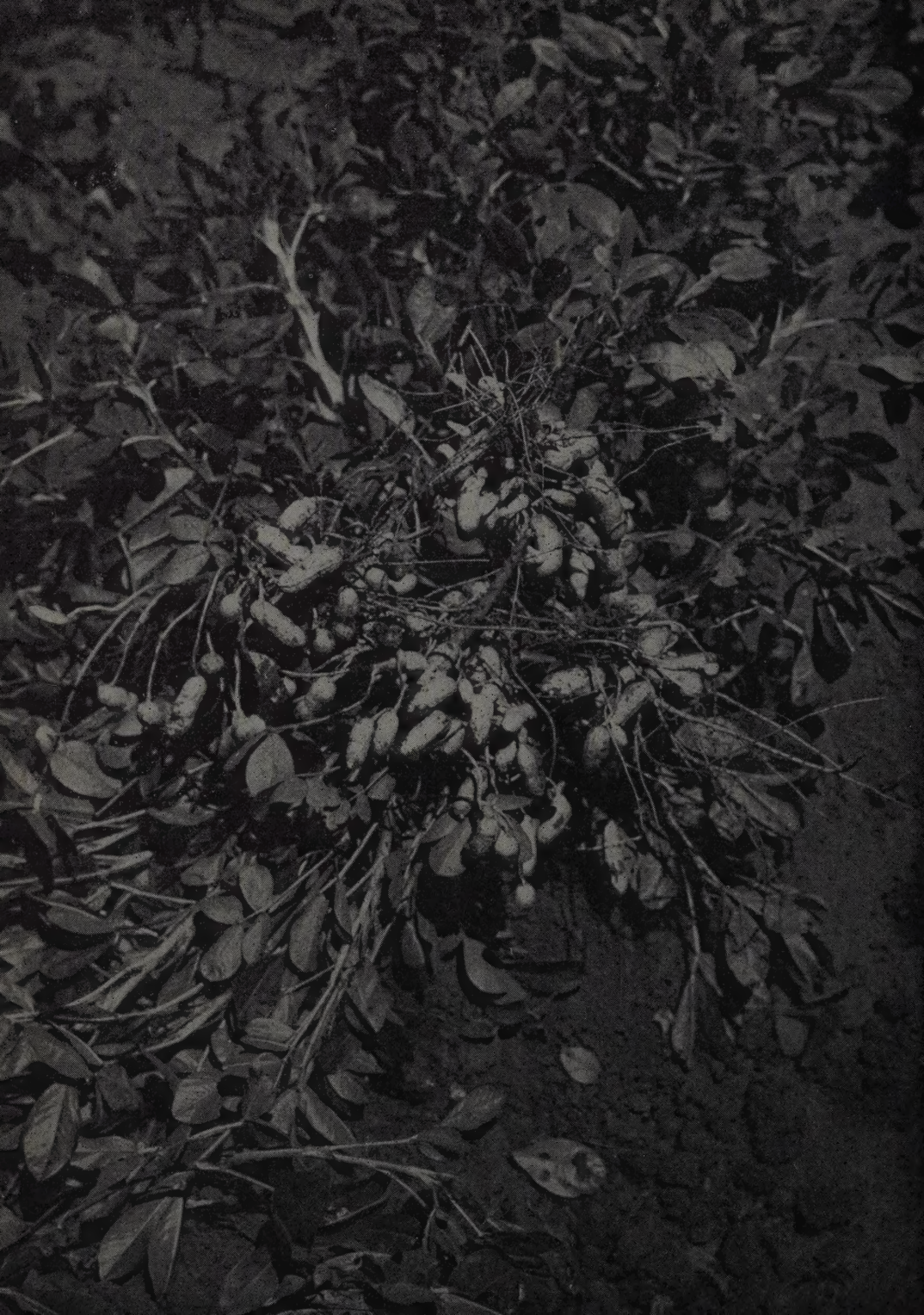
The onset of the factors just described is from a humanitarian point of view to be welcomed as an indication of the progress of more backward communities towards a fuller life, but their influence must inevitably render world supplies less adequate to meet existing demands and bear most hardly upon countries such as Great Britain, which have in the past relied to a great extent upon imports for their food supply.

The problem is, therefore, both urgent and far-reaching; there exists an immediate need and a potential future shortage. It is against this background that attention has been directed to the development of annual crops of oil seeds based upon large-scale scientific agricultural methods not previously envisaged for such products. The British public were first made aware of these developments on Monday, November 25, 1946, when in the House of Commons the Minister of Food made a preliminary statement on the Mission which had recently returned from studying the possibilities of the mechanized production of groundnuts in East and Central Africa.

The monkey nut is already well known as a festive accompaniment of boyhood, and in the United States the peanut is already widely consumed, raw or roasted, or in the form of butter, and its vendors have been celebrated in popular song. This same nut—the groundnut, earth nut, *pistache de terre*, goober—has now, however, been absorbed into the stream of scientific progress and become a valuable means of food supply which could be quickly developed for the benefit of the undernourished peoples of the world.

The groundnut is generally believed to have originated in Brazil, whence it is thought to have been introduced into Asia and Africa in







the 16th century. It is today cultivated principally in the United States of America, India, China and French and British West Africa, with smaller peasant cultivation in certain areas of East Africa, and the total groundnut harvest of the world in 1939 was estimated at 12,000,000 tons.

The groundnut is an annual plant, having either an upright and tufted bunch, or a spreading habit of growth. The bunch varieties grow to about 12 inches in height, the spreading varieties covering up to 18 inches or more all round the plant. Its small yellow flowers—similar in shape to those of the sweet pea—are practically stalkless, but after pollination the petals wilt and droop, the stalk develops, curves downwards and thrusts the embryo seed beneath the ground. There the nut or seed develops and matures, from which habit the names “earth” and “ground” nut are derived.

The matured fruit consists of the familiar straw-coloured or dirty-white brittle pod or husk, holding up to four seeds. A single plant will produce up to forty or more pods when fully grown. The seeds may have red

or white skins, the most common varieties being red. These are the product known to the public as the monkey nut or peanut, and are the important part of the plant from the economic point of view. Thus the groundnut, though matured underground, is not a product of the roots but of the flower, and is itself the seed of the plant.

Although the groundnut plant is grown largely for its seed production, the tops or vines make an excellent hay similar in quality to that of lucerne. In the United States these vines, after harvesting, are baled for stock feed, and increasing attention is now being paid to methods of cultivation and harvesting which will preserve this hay in the best possible condition.

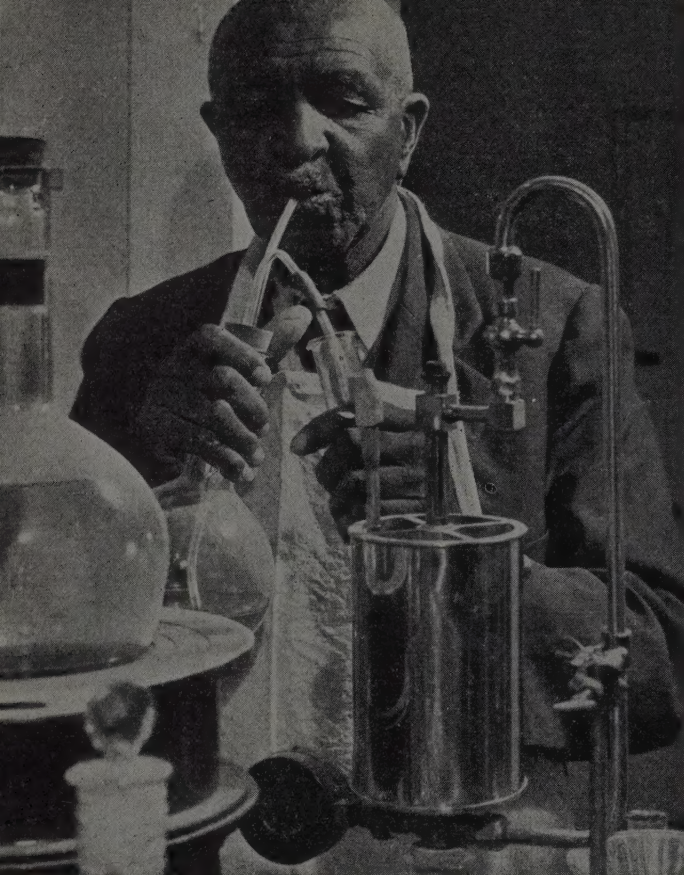
In common with other members of the *Leguminosae*, the groundnut has the power, through nitrogen-fixing bacteria, of extracting nitrogen from the air and storing it in nodules in its roots. With most leguminous crops, such as peas and beans, the root system is left in the ground at harvest, thereby enriching the soil. This, however, is not the case with the groundnut, of which the whole plant

(Opposite) *The groundnut (peanut, monkey nut, earth nut or goober!) grows underground, but not from the roots of the plant, being itself the seed thrust down from the stalk after flowering and matured within the pod. Inter-tropical countries account for most of the world production: some 12,000,000 tons in 1939. (Below) Groundnut plants growing on a farm near Salisbury, Southern Rhodesia*

Associated Press







*Through the experiments of a negro scientist, Dr George Washington Carver of Tuskegee Institute, some 300 uses of the groundnut as a food product have been developed in the U.S.A.*

is lifted at harvest. It is thus important to supply nitrogen to the soil in the form of manure or fertilizer or by growing other nitrogenous crops in rotation.

The groundnut matures in from four to five-and-a-half months, depending upon the variety cultivated, the bunch varieties in general maturing earlier than the spreading varieties. Numerous varieties have been developed by selection to produce nuts suitable for the several uses to which they are put: thus there are large and small seeded types, the latter generally containing a higher percentage of oil than the former. Selective breeding of varieties has also had some success in combating one of the few diseases to which the groundnut is subject.

The groundnut crop was formerly thought to be free from serious pests and diseases, but

it is now recognized that it can be so attacked. The only important pest so far reported in the United States is the leaf hopper, which can strip plants of their leaves and thereby reduce their yield; it can be controlled, however, by the application of insecticide. This pest has not thus far been reported from Africa.

There are three diseases known to be of economic importance: leaf spot, destructive in the United States, but not prevalent in East Africa; the virus known as "Rosette disease", most widespread in East Africa; and wilt, which is of some importance in South Africa and to a lesser degree in the coastal areas of East Africa. Methods of control have been developed in all three cases.

The groundnut as such has been widely consumed whole-roasted or raw — and as a material for the confectionery trade and as peanut butter. Thus, 88 per cent of the commercial crop of groundnuts of the United States of America was consumed in 1941 in this way and only 12 per cent was crushed for oil.

From the point of view, however, of the world supply of oils and fats, the oil obtained by crushing the seed is of vital interest for the production of margarine, cooking fats, salad

oils and as a substitute for olive oil, as well as being an extremely valuable oil for soap-making. It is to these uses that the crops of India and West Africa have been devoted. The groundnut cake derived as a by-product of the crushing process provides stock feed of a high protein content. The vines, as already stated, produce an excellent hay, while the husks obtained from the 'shelling' of the nuts prior to crushing can be used, when burnt, as fertilizers, or can be ground and mixed with molasses to form a cattle food. In addition to these industrial uses, the crops grown by the native peasantry form an important part of their diet, providing protein and fat otherwise lacking; the most popular form of consumption is as groundnut stew.

More detailed experimentation with the groundnut and a close study of its chemical



constituents have resulted in America in the production of some 300 marketable products which can be obtained from the nut and oil, including such oddly related items as candy, shaving lotions, pickles and cheese. These experiments have owed a great deal to the efforts of the negro scientist, Dr George Washington Carver, who died in 1943 after devoting many years of his life to the development of groundnut products.

For the production of groundnuts, the preparation of the seed-bed follows the normal practice of ploughing and cultivation. The most productive yields are to be obtained by the application of fertilizer, phosphates being especially necessary. The simplest method of harvesting is by digging and removing the nuts from the vines by hand. This process can be mechanized, however, with an implement similar to a potato digger. The plants are afterwards swept by a side-delivery rake into windrows, where they are left to dry out. They can then be picked up by an adapted combine harvester, the nuts stripped from the vines and bagged. Where this type of mechanization has not been adopted, the plants are collected by hand, built into small stacks round wooden poles and left to mature; thereafter the nuts are stripped by stationary machines or by hand. The stacking provides some protection against a rainfall during the maturing process and is not required in Africa, where prolonged periods of dry weather occur at the season when this process takes place.



A. J. Thornton

The development of the "Plan for the Mechanized Production of Groundnuts in East and Central Africa", to which the Minister of Food referred, will provide the first example of the large-scale development of this crop, using the full range of modern mechanized and scientific progress.

The scheme envisages the clearing, development and cultivation of 3,250,000 acres of waste scrub land. This will comprise approximately 107 units, each of 30,000 acres in extent, of which 55 are located in the Southern Province of Tanganyika in the hinterland of the existing port of Lindi, 15 units in the Mpwapwa area of the Central Province of Tanganyika, 10 units in the Tabora area of the Western Province of Tanganyika, 5 units on the coast of Kenya just south of the mouth of the Tana River, 5 units in the West Suk area and Kerio Valley of North-West Kenya, and 17 units in Northern Rhodesia, the majority of which lie to the west of the existing railway system.

The preparatory work of clearing the land of existing scrub, small trees and forest is, of course, in itself a major undertaking, but it is planned to develop the total area progressively and to complete the development in a period of six years. Thereafter a complete system of mechanized agriculture will be introduced, from the ploughing and harrowing to the final harvesting by combine harvester and eventual shelling of the nuts.

It has been estimated that the cost per ton of groundnuts produced by this scheme will fall well below the world prices ruling in the foreseeable future, and details are given in the White Paper, Command 7030, of February 1947.

The application of such advanced methods to the backward conditions of tropical Africa brings with it inevitable hazards, including the possibilities of drought, of labour difficulties, of infestation by insects and of diseases, but these factors have been taken into account in the plan. This provides for an adequate staff of agricultural and scientific experts who will be able to bring the most modern practice to bear in the elimination of insects and diseases, the proper cultivation of the soil and the use of adequate methods of soil conservation. These methods will include the use of contour banks and furrows and strip cultivation. The fertility of the soil will receive constant examination, and experiments will be carried out in the rotation of crops to determine the most efficient system.

It is at present envisaged that two years of groundnuts will be followed by two years of grass ley, but trials may also be made with



soya bean, with sunflower and with sorghums as alternative crops in the rotation. It is also proposed that the groundnut vines should be ploughed back into the soil to build up the humus, and provision has been made in the estimates for the application of lime and nitrogenous fertilizers to increase fertility.

A major development of this magnitude will naturally require a considerable labour force, but by the intensive mechanization proposed it is planned to work one unit of 30,000 acres with a total labour force of approximately 6 Europeans and 300 Africans. This labour force will, it is hoped, form a settled community to serve each unit, into which will be introduced the modern amenities of adequate housing and nourishment, medical care, education and general welfare services. All these have been provided for in the cost estimates upon which the scheme is based, and in themselves represent a new standard of life for the primitive local peoples.

Furthermore, vast areas of the land to be developed are at present infested with tsetse

fly, and the eradication of this scourge of tropical Africa from so wide an area will not only bring these waste lands into production, but will be a powerful reinforcement to the campaign still being waged to free potentially productive lands for the benefit of the native population.

The scheme, therefore, is revolutionary in many of its aspects. It replaces the economy of the hand hoe with the science of the tractor, the combine harvester and the fertilizer; it replaces the primitive disease-ridden native habitations with modern villages, enjoying the benefits of medical and social science; it replaces scrub land by fertile farms and plantations. It may, therefore, well assist the solution of the agrarian problem which presses ever more hardly upon the East African lands. This problem is the result of the pressure of an increasing population scratching at the surface of the soil and destroying its fertility by their inability to replace what they have taken out, thereby gradually reducing the areas in which they live to desert.

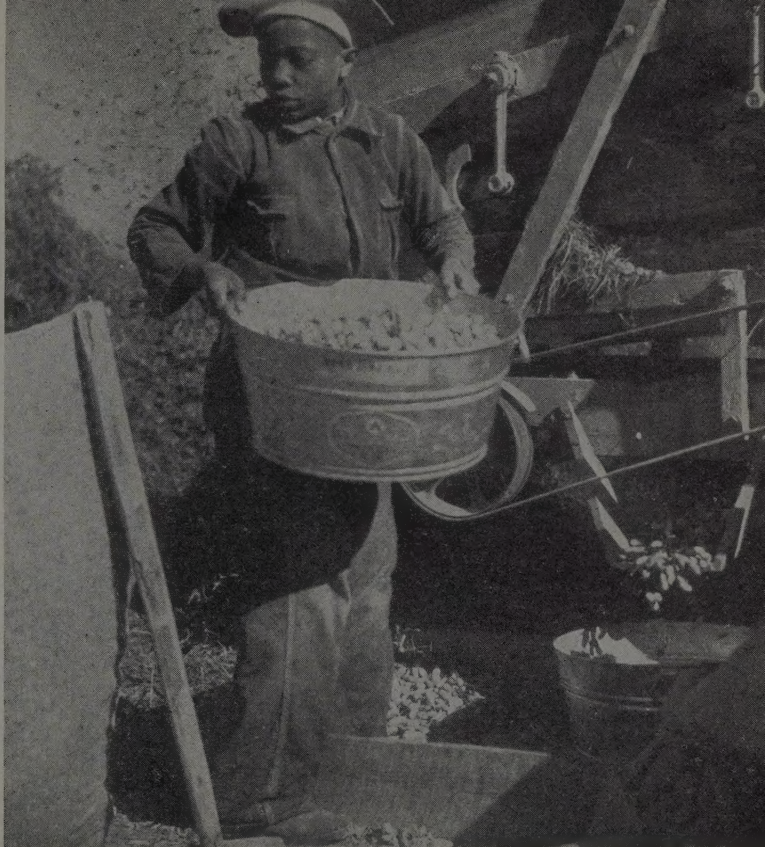
*Since being introduced in West Africa the groundnut has become a staple item of diet for the negro peasantry, who also produce considerable crops for the world market. But primitive methods such as the hand-threshing here seen in Gambia are inadequate to meet the rapidly growing world demand*

By courtesy of Elder Dempster Lines





*The new British development drive, beginning in East Africa, will mechanize the production of groundnuts on an unprecedented scale. Mechanization is, however, not unfamiliar to growers in the United States. This negro lad, on a farm in North Carolina, is taking the nuts as they come from a threshing machine preparatory to sacking them ready for delivery to a factory. Here the oil will be expressed from shelled or unshelled nuts. The hay makes excellent cattle feed, as does the cake left after expressing the oil; while the shells are used for packing and other purposes*



*Associated Press*

Despite the insistent demand for higher standards of living, these can never be attained unless the wealth produced by African peoples from the African land is increased to justify it, and this increase cannot take place—indeed the existing standards cannot be maintained—as long as the present primitive agrarian methods prevail. This scheme, however, may well establish African communities producing a crop at an economic price, ploughing back fertility into the soil and so providing them with a firm basis for a higher standard of life.

The scheme is therefore a notable experiment in Colonial development, and this in the long run may prove its greatest value. At the same time, it should make an important contribution to the relief of the world shortages of oils and fats to which reference has already been made. It is estimated that the yield per acre will be approximately 750 lb. of groundnuts. When, therefore, the total of 3,250,000 acres is developed—of which approximately half will be under groundnuts at any one time—the total production should

be in the region of 500,000 to 600,000 tons of groundnuts per annum, which is equivalent to roughly 250,000 tons of oil. It is estimated that in 1946 Great Britain had a deficiency of about 600,000 tons as compared with her consumption of oils and fats in 1938. It will, therefore, be a great help if all the hopes for the project are fulfilled, but their fulfilment will not in itself completely make up our deficiencies.

The capital sum of £24,000,000 will be required for the development of the project, exclusive of a further £2,500,000 for the construction of a port and railway to serve the development areas scheduled for the Southern Province of Tanganyika. The spending of this sum may be regarded as the first major step taken in the search for additional oils and fats by the exploitation of the groundnut. It is, however, by no means the last step, and it would seem that these nuts, which have been given so many varied and curious names, are destined to play an ever-increasing part in the satisfaction of the desires of mankind to attain new standards of nutrition.



# Paul Kane in Western Canada

by E. A. CORBETT, M.A., LL.D.

*The following article has been written by the Director of the Canadian Association for Adult Education to celebrate the centenary of a famous journey by Western Canada's first painter. The accompanying colour plates are reproduced by arrangement with Rous and Mann Press Limited, Toronto*

The present writer is not in any way qualified to pass judgement upon the artistic significance of Paul Kane. A. H. Robson, in his admirable little book, states that his paintings have greater historical and ethnological value than intrinsic artistic merit, but adds that his work is unquestionably of great importance, and his name is an honoured one among Canadian painters.

Kane's journey through Western Canada during the years 1846-8 came at the best possible time for his purpose. The long and bitter struggle for supremacy in the fur trade had come to an end twenty-five years before with the union of the two competing companies, the Hudson's Bay Company and the North-West Fur Trading Company. Sir George Simpson, who at the age of twenty-one had been chosen at the time of the union to rule over this vast commercial empire, was now at the height of his power, and he ruled with an iron hand a territory 1500 miles from north to south, and 3000 miles from east to west. Within a few years after his appointment as Governor, every corner of the wide regions of Rupert's Land and on into New Caledonia felt the power of Simpson's personality. Abuses disappeared, and greater efficiency in the business of handling goods and furs developed. Except for certain rumblings among the half-breeds and occasional skirmishes between the Indians, there was a wide peace upon the land.

Gradually a transportation system had been ironed out which operated with such smoothness and precision that brigades moving east, west or north from places as far apart as Fort Vancouver, near the mouth of the Columbia River, and the Mackenzie Delta, were so nicely timed that the transfer of freight and passengers was executed with the exactitude of a modern railway system. With the passing of the fierce rivalry of the competing companies the need for speed in the shipments of furs, in order to catch a certain market and thus make a larger profit, came to an end. The Company could now make its own market, and the light canoes which used to make the trip from the Columbia River to Montreal in a hundred days gave

place to heavier York boats. Red River carts in slow-moving caravans, carrying great quantities of goods and supplies, began to make their appearance. The romantic age of the *voyageur*, the free-trader and the explorer was slowly but surely giving way before a business administration which had a greater appreciation of efficiency than of adventure.

When Kane decided to devote his talents to the painting of a "series of pictures illustrative of the North American Indians and scenery" he was planning the fulfilment of a dream he had had since boyhood. On March 1, 1846, Kane visited Sir George Simpson at Lachine. He tells us very little about the meeting except that he had a cordial reception and after exhibiting his sketches was encouraged to proceed with his plans; and arrangements were made for his passage to the North-West with the spring brigade.

It might be well at this point to sketch in briefly the backdrop of experience and training which fitted Kane for his arduous task. Contrary to public belief, Kane was not a Canadian born. He had come to Canada with his parents from County Cork, Ireland, in 1818 or 1819. Kane was then nine years of age. His parents settled at Muddy York (Toronto) and for the next seven years he attended the District Grammar School, where he received his first drawing lessons. Apart from his art studies, his greatest interest was in the Indians camped outside the town. It is apparent that this early interest was the beginning of a genuine passion for self-expression and a desire to depict on canvas the life of the Indians.

For a time after leaving school, Kane was employed in a furniture factory, but his spare time was spent in the earnest practice of his art. In his twenty-sixth year Kane went to Detroit and after five years in the United States had saved enough money to secure passage to Europe. This was in June 1841. For the next five years, penniless and alone, he wandered about Europe visiting art galleries in Paris, Genoa, Milan, Florence and other cities. During these years also, in company with a group of Syrian explorers,





*By courtesy of the Royal Ontario Museum*

Kane's portrait of Kee-a-kee-ka-sa-coo-way, "the Man who gives the War-whoop", head chief of all the Crees. This warrior holds his tribal "pipe-stem", believed to be a particularly potent source of magic. A pipe-stem carrier was elected by the whole tribe every four years to take charge of the venerated object and bring it forth from its wrappings at councils of war, medicine pipe-stem dances or reconciliatory smoking ceremonies.





*By courtesy of the Art Gallery of Toronto*

*Kane's first Western journey, in 1845, took him among the Ojibway Indians of Lake Huron. Their wigwams were of birch bark stretched over poles tied together at the top; here an opening was left to let out smoke from the central fire. They were warm inside but invariably filthy and stinking*

he made a trip into Africa which ended disastrously when the party was deserted and robbed of all their goods by their Arab guides.

As a result of his European tour, Kane brought back with him a number of copies of famous paintings from the galleries of Venice, Florence and Rome. After four years on the Continent and in London, Kane returned to Canada determined to realize his boyhood dream of a trip through the North-West. His book, *Wanderings of an Artist among the Indians of North America*, really concerns two separate journeys. The first one, completed in 1845, took him by canoe and steam-packet to various points on Lake Huron and Lake Michigan where he painted and studied the habits of the Ojibway and Manomance Indians. The second journey, which began in May 1846, required two and a half years to complete and took him from Toronto to the Pacific coast and back.

On May 9, 1846, Kane left Toronto in company with Sir George Simpson for Sault Ste Marie in order to embark in the brigade of canoes which had left Lachine weeks before, following the traditional route up the Ottawa River into Lake Nipissing and down

the French River to Lake Huron. It was altogether characteristic of Sir George Simpson not to allow anything to interfere with his time-schedule. It was a rule he was accustomed to enforce rigidly, and when Kane spent the night ashore at Mackinaw and was tardy the following morning, Sir George calmly sailed away without his official artist. Kane succeeded in catching up with Sir George at Sault Ste Marie, but was disappointed to find that the brigade canoes were too heavily laden to provide him accommodation and that he would have to follow in a company schooner a week later. At Fort William he found that the brigade had gone on the day before, but again Kane procured a canoe and three men and managed to catch up with the brigade ten hours later.

The journey from Fort William to Fort Garry on the Red River, by way of the Kaministiquia and Rainy Rivers into the Lake of the Woods, was a difficult and often dangerous passage involving dozens of tough portages. But all along the route Kane made sketches of the Indians and their encampments. The second week in June, the party entered the Red River and was soon at Fort Garry.





*By courtesy of the Royal Ontario Museum*

*On his second journey, in 1846, Kane's eye met the great plains near Fort Garry (the modern Winnipeg), where a settlement stretched for fifty miles along the Red River. Opposite the Hudson's Bay fort (seen on the right) rose the tin-covered spires of St Boniface, the Roman Catholic church*



*By courtesy of the National Gallery, Ottawa*

*Between Lake of the Woods and Lake Winnipeg the route followed the Winnipeg River, which, broken by many beautiful falls and rapids and fringed with rich woodland, he found the most picturesque he had passed, despite the caterpillars, black flies and mosquitoes that plagued him. On the occasion depicted, a rearguard of Indian squaws were carrying their canoes round White Mud Portage*



Here the artist was surprised to find that the Selkirk settlement, after its long struggle with the North-West Company, had become a prosperous farming and trading community of 3000 whites and 6000 half-breeds, with the farms of the settlers stretching for fifty miles along the Red River. Fort Garry was at this time one of the most impressive of all the forts in Hudson's Bay Territory. It was enclosed by an enormous stone wall, with bastions on which cannon were mounted; inside were large stone houses and handsome residences for the gentlemen of the Company.

Across the river from Fort Garry stood the French Canadian settlement of St Boniface, and to the south, north and west, half-breeds and roving bands of Indians occupied the plains. The two great events of the year for the Red River half-breeds and many of the whites, were the buffalo hunts in June and October. It was the custom to send word around to all the half-breed families to gather on White Horse Plain about twenty miles from Fort Garry. Here the tribe was divided up into three bands, each taking a separate route for the purpose of rounding up the scattered herds of buffalo. Each of the bands of horsemen was accompanied by as many as 500 Red River carts, drawn by either horses or oxen. When Kane arrived at Fort Garry he learned that the half-breeds had departed three days before on their regular June buffalo hunt. As he was most anxious to witness this stirring event, Kane immediately procured a guide, a cart and a saddle-horse and started after one of the bands.

A few days later, the party came upon the first big herd of buffalo. Kane was awakened one morning at daybreak, and shortly afterwards, with the scouting party, saw before him an immense herd of buffalo which stretched over the plains as far as the eye could reach. Soon the main party of hunters, numbering 130, arrived, and preparation for the hunt began. "Everything being adjusted," says Kane, "we all walked our horses toward the herd. By the time we had gone about 200 yards the herd perceived us and started off in the opposite direction at the top of their speed. We now put our horses to the full gallop and in twenty minutes we were in their midst. There could not have been less than 4-5000 in our immediate vicinity, all bulls, not a single cow amongst them. The scene now became one of intense excitement, the huge bulls thundering over the plain in headlong confusion—upon the fall of each buffalo, the successful hunter merely threw some article of his apparel to denote his own prey and then rushed on to another. The

chase continued only about an hour and extended over an area from five to six square miles, where might be seen the dead and dying buffalo to the number of 500."

Kane now made his way back to Fort Garry and thence by boat to Norway House. He remained at Norway House until August 14, waiting for the York Factory Brigade on its way inland with goods for the interior trade. He was happy to be on his way again with the west-bound traders. Crossing the foot of Lake Winnipeg (so named because of its muddy waters) the party portaged around Grand Rapids where the Saskatchewan River enters Lake Winnipeg, and made their way up-river to Fort Carlton. The brigade was in charge of Chief Factor Rowand, one of the best known and most colourful characters in the fur trade. With Rowand was a clerk by the name of Lane who had special charge of a shipment of seventy packs of otter skins paid each year by the Hudson's Bay Company to the Russian Government in return for the privilege of trading in Russian territory (Alaska being then still Russian). It is interesting to note that these seventy packs of seventy-five otter skins each were collected on the Mackenzie River, shipped to York Factory on Hudson's Bay, whence they were shipped up the Saskatchewan, over the Rockies to the Pacific Coast and north to Sitka. I shall discuss later the significance of this route and of that followed by Kane.

Not far from Fort Carlton, Kane watched a group of Indians at their ancient practice of slaughtering buffalo by driving them into a walled enclosure and dispatching them as they stood packed in the ghastly arena. "I have seen", he says, "a pound so filled with dead carcasses that I could scarcely imagine how the enclosure could have contained them while living. There are thousands killed in this manner every year but not one in twenty is used—thousands are left to rot where they fell." All through the Western States and Canada at this time the senseless slaughter was going on which ended in the disappearance of the buffalo from the Western plains.

On Sunday, September 26, Kane and his party forded the Saskatchewan River from the south bank and were welcomed to Fort Edmonton. Here he found a large establishment, the centre of supply for many districts—north, south, east and west. A hundred and thirty persons—men, women and children—lived within the pickets of Fort Edmonton. The same night of their arrival the wind increased until it became a hurricane, and Kane, from the safety of the fort, witnessed



at Fort Edmonton Kane  
 encountered a warlike party  
 of 1500 Indians, intent  
 on a raid. Their notori-  
 ous Blackfoot chief, Big  
 Snake, posed with his sub-  
 ordinates for Kane, whose  
 sketches were regarded  
 as a favourable 'medicine'



By courtesy of the National Gallery, Ottawa

one of the most alarming sights known to the early settlers of the plains—a prairie fire. As far as the eye could see, the country blazed through the dark night, making what Kane describes as a terrible scene.

Kane, in company with Lane, the gentleman in charge of the shipment of furs to Russia, left Fort Edmonton on October 6, bound on what was to be a difficult journey. The trail lay north-west from Edmonton to Fort Assiniboine on the Athabaska River and thence by way of Athabaska Pass to Boat Encampment on the big bend of the Columbia River; then down the Columbia to Fort Vancouver and the Pacific Coast.

On November 12, Kane and his companions reached the height of land and the small lake known as the "Committees Punch Bowl" which forms the headwaters of the Athabaska River running east and north, and one branch of the Columbia running west of the Rockies southward. The snow was so deep now that the horses were abandoned and the party proceeded on snowshoes. On November 14 and 15, in freezing temperature, Kane, who had remained behind the others to complete a sketch, found it necessary to ford the gorges of the Athabaska and the Columbia seventeen times alone. This tortured procedure continued after Kane caught up with the party, with the result that they arrived at Boat Encampment almost perished

with cold and hunger; but the worst of the journey was over.

The trip down the Columbia was not difficult in the light of the hardships encountered in the Athabaska Pass, and the party arrived safely at Fort Vancouver on December 8. This, though situated far within what the Oregon Treaty of the previous June had recognized as United States territory, could still be described by Kane as "the largest post in the Hudson's Bay Company's dominions", with a staff of two chief factors, eight or ten clerks and 200 voyageurs. At the time of Kane's visit one of Her Majesty's Ships was stationed in the river and he found "plenty of amusement" with her officers.

During the winter months spent at Fort Vancouver, Kane was busy travelling, sketching, and studying the habits and customs of the "Flatheads", the "Cowlitz" and the "Chinook" Indians. In a painting reproduced with this article, Kane shows the way in which the heads of children were shaped from infancy to produce the long slanting forehead and flat back of the head which was a peculiarity of the Coast Indians. The Indian mothers carried their infants strapped to a piece of board covered with moss or loose fibres of cedar bark, and in order to flatten the head, they placed a pad on the infant's forehead, binding on top of this a piece of





By courtesy of the National Gallery, Ottawa

*The Indians on the Columbia River were incorrigible gamblers, their favourite game being "Al-kol-lock". A three-inch ring of wood or bone with six beads attached was rolled along the ground to strike a barrier of sticks; on the rebound the two competitors each aimed a dart so as to land under the falling ring. Points were gained according to the colour of the bead nearest each dart*



By courtesy of the Royal Ontario Museum

*A faithfully recorded picture of weaving among the Flatheads; the men wore no clothing in summer and nothing but a blanket in winter. Dogs were specially bred for their long hair which was mixed with goose-down and a little white earth, and then beaten and twisted into threads for the loom*



*Many tribes of the West Coast had a custom whereby they flattened their heads, looking with scorn upon all round-headed Indians, from whom they took their slaves. All Flathead infants, when born, were strapped to a board for nearly a year while their foreheads were subjected to continual pressure. This process produced the distinctive wedge-like shape*



*By courtesy of the Royal Ontario Museum*

smooth bark held by a leather band passing through holes in the board on either side. A pillow of grass or cedar fibres was placed under the back of the neck to support it. The process commenced with the birth of the infant and continued for a period of eight to twelve months. This gradual operation was apparently completed without undue suffering, as Kane states that he did not hear the infants crying or moaning.

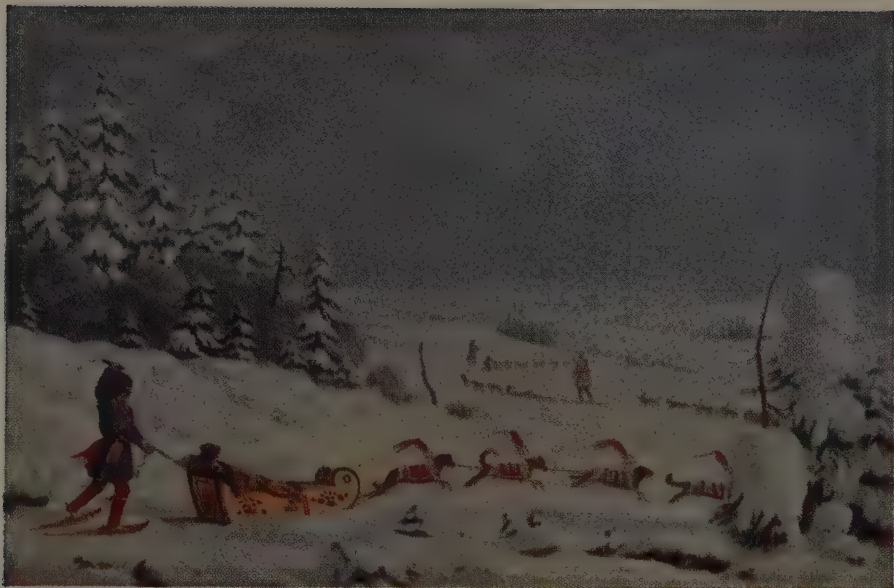
In April, with six Indians paddling, Kane made his way up Puget Sound by canoe to Fort Victoria on Vancouver Island. He describes it as standing on the banks of an inlet about seven miles long and a quarter of a mile wide, forming a safe and convenient harbour deep enough for any sized vessel. Its Indian name was Esquimalt, "the place for gathering Camus roots". Here he was welcomed by Mr Finlayson, who was in charge of the Fort. He describes the quality of the soil as fertile, there being great quantities of clover and wheat in sight.

Fort Victoria was a large establishment and

Kane was comfortably housed. Here he remained two months sketching and exploring the island and acquainting himself with the natives. The men wore no clothing at all in the summer, and only a blanket made of dogs' hair and goose-down in the winter. The Indians bred dogs for clothing purposes; these were small animals with long hair of "a brownish black and a clear white". The hair was cut off with a knife, mixed with goose-down and a little white earth. The mixture was beaten together with sticks and twisted into threads by rubbing it down the thigh with the palm of the hand, after which it was twisted a second time on a distaff. The threads were then woven into blankets.

Kane spent several weeks in travel about the island and over to the mainland and gives lively descriptions of the customs of the Indians and their way of life; slavery in its most brutal form he found practised by all the coastal tribes. Gambling games similar to those of the plains Indians were constantly in play.





By courtesy of the Royal Ontario Museum

*In the winter of 1847-8 Kane accompanied a bridal party on the 200-mile journey from Edmonton to Fort Pitt. There were three "carioles" (one of which is shown above) and six sledges, each with four gaily decorated dogs. They were seven days on the way, killing seventeen buffalo for food*

Kane's description of the manner in which the islanders captured whales is an interesting example of the skill and cleverness of the Indians of the Coast. When a whale was seen blowing off-shore, the natives rushed to their large canoes holding ten or twelve men each. In these they put off equipped with a number of sealskin bags filled with air. To each bag was attached a barbed spearhead made of bone or iron tied to a strong line eight or ten feet in length. In the socket of the spearhead was fitted a handle seven or eight feet in length. When the whale was overtaken, the barbed heads with spear and bags attached were driven into him and the handles were withdrawn. The buoyancy of these bags prevented the whale from submerging and he was soon killed and towed ashore.

About the middle of June 1847, Kane left Fort Victoria on his homeward trip. This meant re-traversing the passage he had followed on his way west. From Edmonton, where he arrived on December 5, Kane made an excursion to Fort Pitt, a distance of 200 miles, in company with a bridal party. It was mid-January, the snow averaged three feet deep, the thermometer dropped to 47° below zero, and they were seven days *en route*. The party consisted of the bride and groom

and nine men. They had three "carioles" (for single passengers) and six sledges with four dogs to each, forming a long and picturesque cavalcade. All the dogs were gaudily decorated with bright-coloured saddle-cloths, fringed and bedecked with bells and feathers in a most fantastic manner. During the trip they trusted entirely to their prowess as hunters for a supply of food, as was the custom of these early voyageurs, and Kane remarks that they killed seventeen buffalo on the journey for feeding themselves and the dogs.

The spring and summer of 1848 were spent in completing, at various points on the journey, a collection of more than 500 sketches of Western Canada and its inhabitants which gave Kane enough material to work with for the rest of his life. On October 1 Kane's wandering among the Indians came to an end with his arrival at Sault Ste Marie. The rest of his journey to Toronto was completed on a steamboat, and Kane's final comment is that he found great difficulty in sleeping in a civilized bed.

Undoubtedly Paul Kane's writings and sketches have added a great deal to our knowledge of the Indian tribes of Western Canada and have, therefore, considerable historical and ethnological value. As was to be



expected, he covered no uncharted territory and his book makes little contribution to what was already known of the country; but the nature of the routes followed by Kane, and by the shipment of otter skins mentioned above on their way to Russia, affords a significant comment on the geography of Western Canada as it affected the exploration and development of the country a hundred years ago. We are to think of it as being divided into three main zones: the forest zone to the north, the prairie to the south, and the zone of mountain ranges shutting them both off from the coast to the west. Ever since the gentleman adventurers had established themselves on the shores of Hudson's Bay in 1670, trade had followed the great water highways of the country. Exploration, except in rare cases, had avoided the trackless wastes of the forest and prairie zones. The important trading posts were always strategically placed to facilitate the water shipment of supplies and of furs. Later, when Red River carts were used, they too followed the river valleys. Cumberland House was the junction point from which supplies proceeded to the Arctic, and through which most of the outgoing trade was cleared.

After David Thompson, in 1811, made his

way through the Athabaska Pass to the Columbia, and so to the Pacific, Fort Edmonton became important as the jumping-off place for the Pacific trade. There was an additional and important reason why trade and exploration had followed mainly the water highways of the west and north. The fur-bearing animals of the forest zone were the chief commodity of the fur trade, and the Indian tribes of the north were canoe men and trappers. The tribes of the plains, particularly the warlike Blackfoot, were horsemen and depended for food, clothing and shelter upon the buffalo. The Indians of the North were friendly and eager to trade. The prairie tribes fiercely opposed the encroachment of the white man.

With the coming of the railway some thirty-five years after Kane's journey, settlement followed the steel rails and the new centres of trade and population were the towns which sprang up along the C.P.R., across the prairie from Winnipeg to Calgary and through the Rockies to Vancouver; Edmonton, an earlier centre, has only recently been brought once more into prominence by the development of the Northland and the establishment of inland road and air routes to Alaska.



# Scottish Building and Scottish Culture

by GEORGE SCOTT-MONCRIEFF

THE splendid work of the National Buildings Record in England has already been a source of delight to those many who have seen reproductions of the photographs in the Council's collection. On a more modest scale similar work has been carried out by another Council working in Scotland.

So far it has not been possible for the general public to see so much of the work of the Scottish Council. The reason for this is that, with the very limited funds at its disposal, the Council decided to concentrate upon measured drawings rather than photographs, since it was impossible for it adequately to cover both fields and it was deemed that

detailed drawings were essentially the more valuable architectural record. Although exhibitions of the drawings have been held in Edinburgh and Glasgow, their reproduction to a suitable scale has not been practicable, nor has it yet been possible to lodge them in some permanent collection where they may be constantly accessible to the public.

It is greatly to be hoped that they will eventually—and not at too late a date—form part of the collection in the new Print Room which we hope to see opened in Edinburgh to display the vast overflow from the national collections. At present there is in fact no place where prints and engravings can be on

*At Stirling, Scotland's finest mediaeval bridge crosses the River Forth. Once "the key to the Highlands", the 'auld brig' is now used by pedestrians only. Its powerful cutwaters are offset by the lightness of its arches, such contrast being a marked feature of Scottish architecture*

photographs by Robert M. Adam





*Borthwick, Midlothian, an impressive Scottish castle of early type (c. 1450). Two massive wings project from the main block. It is roofed with slabs of stone laid on vaults and has a machicolated parapet—one through which boiling liquid or various missiles could be dropped onto attackers*

exhibition, the wall-space in the National Gallery and the National Portrait Gallery being inadequate even for the paintings. To such a Print Room the collection of drawings made by the National Buildings Record, Scottish Council, can bring a gallery that will cogently increase the layman's understanding of his native architecture and provide an introduction to it for the visitor, while, not least, presenting architects with an invaluable source of reference.

It is with this in mind that the Council has used the widest terms of reference. It located existing drawings of the Gothic churches, and added to them; it measured and recorded castellated and classical buildings; nor did it overlook the 'vernacular' architecture of the country villages and towns. Subjects range from the magnificent house of Traquair to whole street façades in Haddington and to characteristic Fife cottages and seaport houses. The later small Collegiate churches of modified Gothic and the earlier, gracefully austere,

Presbyterian churches are represented.

Britain's rebuilding programme is at present chaotic, but it is to be hoped that at last it will be possible to build in a way that does not flout our older national traditions. These measured drawings provide a factual study and interpretation of the trends of the Scottish tradition of building, whose simple essentials are most readily adaptable to modern constructional technique. They should materially assist us to understand and perpetuate an important aspect of national culture.

It should perhaps hardly be necessary to embark upon a general defence of national and regional cultures. Yet there is today so much that is specious being written and spoken about the standardization of culture—and rather particularly in respect of architecture—that, even where native common sense may reject the fullest implications, a considerable amount of confusion has been spread.

There are those who airily claim that





*Culross, Fifeshire, is the best example left of a Scottish burgh of late mediaeval times. In the foreground stands the market cross, to the right of which is a small tower, known as the 'Study' and formerly associated with the near-by Cistercian Abbey (founded in 1217), of which only the choir and western tower now remain*



(Above) Traquair House, a masterpiece of Scottish baronial building, which has 'grown' through some three centuries, yet remains harmonious. (Below) The Long Gallery at Pinkie House, with its painted ceiling, exemplifies the blending of an English 16th-century architectural feature into the Scottish environment





nationality can no longer influence architecture: that modern methods and materials must make for a universal style. I have heard a suave planner telling us on the wireless that "there is now no such thing as local materials" thanks to, "improved transport". Support is claimed for the 'universal' concept of culture in the reputed 'contraction' of the world with easier transit from one place to another: a claim that, incidentally, carefully ignores the concomitant facts of passports, visas and downright prohibitions that effectually make travel more difficult than ever before!

Part of the contemporary cultural heresy is perhaps due to a tendency to isolate culture, to give it an almost autonomous position of its own, with its own scale of values, its own

criteria of good and bad: as though, in fact, it were itself an absolute, itself the ultimate good of human personality instead of a by-product, howsoever delightful, of man's phases of social existence. In fact, of course, cultures are of their nature local, dependent upon local conditions and characteristics. They only contribute to any such possible thing as a universal culture through being rooted in the particular. Universal culture means, presumably, the sum of many cultures, not their dissolution.

Although we may be impressed by photographs of concrete sanatoria, and the like, particularly when these are taken in glorious sunlight and before the concrete has had time to crack and discolour, I think most of us experience a certain dissatisfaction in them.



*Houses in Old Edinburgh: the 'lands' of Canongate, with Salisbury Crags rising in the background. In order to accommodate an increasing population in the 16th and 17th centuries it became necessary to build many-storied houses. The principle of one roof covering a number of families was, therefore, accepted in Scotland long before the development of comparable flats or tenements in England*



*The heavy, but imposing, first phases of the classical revival are apparent in Melville House, Fife-shire (c. 1700). The classical style, successfully assimilating influences from abroad, reached its height in the hands of such distinguished Scottish architects as James Gibbs and Robert Adam*

It is not merely that we feel that some grace has gone out of life; we also feel that some disgrace has crept in. We see expressed in those depersonalized lines, that card-index façade, something of the ruthless mechanical mentality that, in another manifestation, has given us totalitarian government. There is nothing surprising in this. Cultural phases are expressed in their architecture. Are these buildings slick and efficient?—so, within limitations, is totalitarian government! The age that produces the one might be expected to produce the other, but that does not mean that either is desirable or a part of the main and more creditable course of human achievement.

If architecture is the most immediate expression of national tradition, it is also one

of its safeguards. Faced by streamlined concrete or the kindred monotony of urban or suburban dwelling-boxes whose only inspiration was a passing economy, a man is far more likely to allow his government to slide into authoritarian excesses of standardization than if he lives amongst buildings that reflect the variety and independence of human nature.

Cultural isolationism is, no doubt, as arid a thing as cultural universalism, of which, paradoxically, it is not infrequently the outcome. National cultures must, and do, learn much from abroad. Foreign influences are frequently referred to, foreign accents introduced with good or bad effect. Only the purist can object to them on the ground that they are foreign; and ultimately the purist



cannot really approve of anything if he is determined upon an isolated national inspiration. But the success of introductions must always depend upon their assimilation into a certain persisting form shaped by the national genius, appetite and needs. The perfect Chinese pagoda could only be out of place in Scotland: as, indeed, is any of the few lamentable efforts that have been made to introduce English half-timbering (mercifully chiefly confined to tea shoppes).

Of all the arts, architecture most immediately reflects the life of the people of a country. Their climate, their landscape, their prosperity, the lag between wealth and poverty, their foibles and their notions of elegance and comfort: their ideas on worship, on the place of the family, on the importance of education and the arts: all these leave their mark clearly expressed in the nation's building. It is from these that its architecture must flower, these that restrict or give it freedom. It is perhaps through overlooking this essential relevance of tradition to everyday life that there sprang up the false notion of a cultural hierarchy of absolute values by which things that cannot be compared are compared, and a scale of values is rigged upon mere contrast.

With indescribable beauty Compton Wynyates expresses aspects of England and the English: similarly, Traquair expresses aspects of Scotland and the Scots. An Englishman probably prefers Compton Wynyates; a Scotsman probably prefers Traquair. His preference need make no difference to his appreciation of the foreign style; it is based simply upon what is relevant to his being, to his background and to the country he loves. A wealth of analysis can be based upon either building: and cannot express it. It is itself an expression. If it were to be re-expressed at all it could only be in painting or in poetry—another art-form, re-creating in a distinct medium the underlying inspiration that brought the building itself into being.

There are curious contrasts between the ideas of homes even between two peoples so geographically close as the Scots and the English. In England what are called (if you wish to condemn them) tenements, or (if you wish to sell them) flats, are a comparatively recent development of urban architecture. In Scotland the principle of one roof covering a number of families is of long acceptance. The 'lands' in old Edinburgh were built with a common stair; and sometimes a considerable range of social levels was represented in the flats that opened off it. When the New Town came to be built there were streets, such as India Street, from which, while the façades

give every appearance of a regular row of town houses, one front door opens onto a self-contained house of two floors and a basement, while the next gives access to a stair leading up to two separate flats, on a second and third floor level, running right across the neighbouring frontages. It is, indeed, a very satisfactory arrangement, and one that might well be used today to preserve the homogeneity of streets while allowing for small houses suitable to a variety of demands.

But of course there are many contrasts, more or less explicable, between the two neighbouring traditions: Scotland's predilection for the Norman long after England was completely won to Gothic, and the sharp cleavage between the later Gothic developments in the two countries—perpendicular tracery in England, curvilinear in Scotland. Scotland went to France for the basic castellated forms that she developed so beautifully to her own taste and requirements. Although, indeed, the classical revival did tend everywhere to level out distinctions and to introduce a range of styles derived from Greece, Rome, Spalato, even these have their distinctive modes of application, dictated partly by climate and available materials, partly by idiosyncrasy.

Many modern innovations—as flat roofs and over-lavish fenestration—have already betrayed themselves as unsuited to the Scottish climate. The old ways of building were not casual whims but the result of practical knowledge and experience which it is always rash to overlook for the sake of novelty. The steep roofs and the thick walls of the old houses were the fruit of reason.

In compiling its detailed survey of the traditional building of Scotland, the Buildings Record has provided a collection that, once it is put upon permanent exhibition, can be of great service to the country. Scots have been less intelligent about their heritage than the English. There has been too little understanding appraisal, and there are available far too few pictures that intelligently convey the nature of our own architecture. The general public is liable, when architecture is mentioned, to think rather in terms of the better-publicized building of other countries: of Westminster Abbey or St Paul's Cathedral, of Chartres or the Taj Mahal, of wooden-fronted inns or cobbled cottages of Sussex. Each and every one of these has its merit, each has its own place. But it behoves the people of Scotland to know first of the truly great architecture of their own country which is the most relevant to themselves, the most pertinent to the future of their own culture.



# Climbing Mount Victoria

Notes and Photographs by F. S. SMYTHE

*Seven miles to the south of Kicking Horse Pass, over which runs the Canadian Pacific Railway, rises the majestic peak of Mount Victoria. Its southern aspect is seen above, framed by spruce trees—part of the huge forests smothering the lower reaches of the Rocky Mountains to a height of about 6000 feet*





*My two companions ascending the lowest portion of Mount Victoria's long south ridge. The climbers have roped themselves together as a precautionary measure before negotiating the many knife-like edges of snow and ice*



*Climbers must conquer a number of minor summits before reaching the 11,365-foot peak. There are forty-seven peaks in the Canadian Rockies exceeding 11,000 feet, of which Mount Robson, 12,972 feet, is the highest of all*





*Mountaineering is hard work; the climbers, now over 10,000 feet up, pause for a breather, resting on the ice-axes. The weather is ideal, the wind scarcely sufficing to set the clouds sailing across a vivid blue sky.*



neath this steep crest a precipitous ice-slope falls away to the narrow gap below. To secure the party while descending, the second man has driven his axe into the snow, and is about to hitch the rope round it





*As they near the crest, with a rocky chasm on one side and thousands of feet of ice-slopes on the other, the climbers move with extreme caution, constantly sounding the overhanging snow with their axes before advancing*



*The summit ridge of Mount Victoria rises in fragile beauty against a seemingly infinite ocean of blue mountains, extending westwards, range upon range, across British Columbia towards the Pacific Ocean 400 miles away*





*Seen from the summit of Mount Victoria, Lake Louise nestles like some radiant gem at the mountain's foot; beyond it stretches the wide valley through which the Canadian Pacific Railway crosses the Great Divide*

# Constantinople and the Straits

## A Long View. II

by A. C. EDWARDS

*In our June number Mr Edwards traced the evolution of the problem of the Straits up to World War I. He thus gave his readers the perspective they need in order to survey, with him, the claims of Turkey to maintain her long-held guardianship of the Straits, and of the Soviet Union to share it*

THE Russian Revolution, and the effective establishment of the Soviet Union, preceded by only a few years the Turkish Revolution and the proclamation of the Republic of Turkey. In both countries, revolution was the fruit of centuries of ignorant and corrupt despotism, culminating in defeat in war. Both governments had been compelled to liberate, by force of arms, large areas of their countries from the occupation of the Western Powers. Both were regarded as outcast governments with whom it was improper for civilized states to have normal diplomatic relations. Thus the two states were drawn together by similar upheavals, common adversity and common ostracism.

One of the first acts of the Bolshevik Government was to publish Russia's secret treaty with the Allies, which had promised her Constantinople and the Straits. The Bolsheviks renounced these claims and acknowledged the full sovereignty of Turkey over those areas. At the same time they provided Mustafa Kemal with arms, without which his valiant but miserably equipped troops could hardly have succeeded in freeing Turkish soil from the invader.

The friendly relations which were now established between the two governments resulted in the signature of two treaties. In the first, signed in 1921, Russia voluntarily re-ceded to Turkey her old provinces of Kars and Ardahan; the second, in 1925, was a treaty of Friendship and Neutrality. It seemed, indeed, as if the old suspicions and hostilities were buried at last.

The régime of the Straits, established by successive international agreements, in 1841, 1856, 1871 and 1878, underwent serious modifications after the defeat of Turkey and the occupation of Constantinople by the Allies in 1918. Once more the chief antagonists at the Peace Conference were Britain and Russia; but their rôles appear to have been reversed. For Britain, which, for a hundred years had insisted on keeping the Straits closed to vessels of war, now strove for

complete demilitarization and freedom of passage; while Russia, which had always demanded the right of egress into the Mediterranean for her warships, now sought to protect herself from foreign attack by insisting that the Straits must be closed to warships of all nations, including her own. In the end, Britain had her way. The Straits were demilitarized, and freedom of passage for warships was allowed, within certain limitations.

### THE MONTREUX CONVENTION

A new Convention Relating to the Straits, signed at Lausanne, did not, however, endure for very long. The restless and ruthless policy of the Axis leaders provoked alarm in Turkey; so that in 1936 she asked the Powers for authority to refortify the Straits as a measure of protection for herself. In June 1936 the representatives of nine states met at Montreux; and after a month's negotiations, the Montreux Convention was signed. It granted Turkey the right to remilitarize the Straits so that she became once more master in her own house. Important changes were also made in the existing regulations, mostly in Russia's favour.

Stripped of its less important articles, the Montreux Convention—an ill-arranged and ill-drafted document, which still governs the navigation of the Straits—provides *in time of peace* for the free passage of all merchant vessels; for the free passage of warships of non-Black Sea Powers, with limits as to tonnage and length of sojourn in the Black Sea; for the free passage of warships of the Black Sea Powers (*i.e.* the U.S.S.R., Rumania, Bulgaria and Turkey) without limit of tonnage, provided they pass through singly; and for the free passage of naval auxiliary vessels or small warships armed with a maximum of two small guns. The Convention provides *in time of war, Turkey being neutral*, for the free passage of all merchant vessels; for the free passage of the warships of non-belligerents as in time of peace; and prohibits the passage of belligerent



warships, except when going to the assistance of a victim of aggression. *In time of war, Turkey being a belligerent*, the Convention provides for the free passage of neutral and friendly merchant vessels; and leaves the question of the passage of warships to Turkey's discretion.

The friendly relations which had been established between Russia and Turkey in 1921 by Lenin and Mustafa Kemal continued until 1939. In the spring of that year, when the European Powers were lining up against the coming conflict, the Turkish Republic placed herself on the side of Britain, France and (as she believed) Russia. It was her intention to negotiate treaties of alliance with all three. Her negotiations with Britain and France were successful; but the Russians, having reached an agreement with her on every point, suddenly left her and the two Western Powers in the lurch and signed a pact of Friendship and Non-Aggression with Germany. Turkey's Foreign Minister was kept waiting in the lobbies of Moscow while Molotov and Ribbentrop drafted their famous treaty.

The German invasion of Russia was

received in Turkey with mixed feelings. On the whole the Turks were not displeased to witness the Nazis and Bolsheviks doing their best to destroy each other. This attitude was particularly true of the so-called Pan-Turanian party.

There are today some 20,000,000 Turks in the Soviet Union—more than there are in Turkey itself. They occupy an immense territory, which extends eastwards for 3000 miles from Turkey's eastern frontier, deep into Sinkiang. North and south their lands extend roughly from the Trans-Siberian Railway to the mountains which fringe the north of Persia, Afghanistan and Tibet.

Since the latter days of the Sultanate there had existed in Turkey an irredentist movement, aimed at constituting out of these "Turanian lands" a great Turkish Confederation, under Turkey's leadership. The movement was suppressed by Mustafa Kemal, who deprecated anything in the nature of an adventurous policy and who advocated an understanding with Russia. After his death in 1938, however, the Turkish authorities had been less uncompromising in their attitude towards the movement.

*In 1919, after the defeat and destruction of the Ottoman Empire, British officers supervised the dismantling of the forts along the Straits, in fulfilment of the unfortunate policy—since reversed—of trying to deprive Turkey of the guardianship that she has exercised for almost 500 years*

Imperial War Museum



*From this lowest point of her fortunes Turkey was rescued by one man: Mustafa Kemal. He it was who inspired and organized resistance to the victorious Allies and the subservient Sultan's Government; who built up a new national army in Anatolia to drive out the foreigners; and who, on becoming President of the Turkish Republic in 1923, carried through a programme of reforms which have swept away the barriers between Turkey and the West. Symbolic of his reforms was the change from Oriental to Western dress, which (right) Mustafa Kemal is seen wearing as he interrogates a camouflaged scout on manoeuvres*



The German attack on Russia was the opportunity for which the Turkish irredentists had been waiting. For they regarded as inevitable the defeat and disintegration of the Soviet Union, and they were confident that the "liberation" of Turkish Transcaspia was at hand. When, however, it was the Germans and not the Russians who suffered defeat, the Turkish authorities appeared to have decided that it would be politic to suppress the Pan-Turanians. The government, no doubt, thought that the denunciation of the movement and the arrest and trial of its leaders would gain good marks for them in Moscow. Moscow, however, was far from being impressed. In fact, the Russians regarded the whole affair as so much eyewash, and did not hesitate to say so in their press and radio. From that time on, indeed, the attacks on Turkey—her government, her institutions and her policy—became so constant and so harsh that it was obvious that something serious was in the wind. The denunciation by the Soviet Government, in March 1945, of the Turco-Soviet Treaty of Friendship and Neutrality

of 1925, did not therefore come altogether as a surprise in Ankara.

That, however, was only the first step; the second was not long in coming. In June 1945 the Soviet Government put forward certain conditions, the acceptance of which by Turkey was stated to be a necessary prerequisite to a new treaty with Russia. Those conditions were the retrocession of the districts of Kars and Ardahan in eastern Anatolia and a revision of the Montreux Convention, which would permit Russia to share in the defence of the Straits.

The reaction of the Turkish Press to Russia's demands was instant, unanimous and determined. The government was called upon to reject them without discussion; and this, in July 1945, it did. The Russian reply was a flood of anti-Turkish propaganda, all very sordid and ignoble, and painfully reminiscent of the Hitlerian technique. If, however, the Russians imagined that by such methods they could undermine Turkish resolution, they were mistaken. Instead of being cowed into silence, the Turkish Press gave as good as it



got. A long-distance bombardment was kept up for weeks between Moscow and Istanbul.

In August, and again in September last, the Soviet Government presented two more notes to Turkey on the Straits question. Briefly, the Russian proposals were, (1) that the Straits should always be open for the passage of merchant vessels of all countries; (2) that they should always be open for the passage of warships of the Black Sea Powers only; (3) that the passage of warships of non-Black Sea Powers should not be permitted, except in special cases; (4) that the régime of the Straits was the joint responsibility of the Black Sea Powers with Turkey; and (5) that the defence of the Straits should be carried out jointly by Turkey and Soviet Russia.

Turkey, in her reply, intimated that she might agree to the first three proposals; but pointed out that the régime of the Straits was governed by the Montreux Convention, which could not be revised except by its signatories. She again courteously and firmly refused to consider the suggestion that Russia should be allowed to share in the defence of the Straits. She declared that the granting of bases on her territory would be an infringement of her sovereignty and a menace to her independence.

The Turks kept the British Government informed of the progress of their negotiations with the Russians. They took the view that British policy on the Straits question re-

mained, down the generations, essentially unchanged; and that they could count on our support now as in 1841, 1854 and 1878.

Their diagnosis appears to be correct. We are likely to support Turkey now, as in the past, on the issue of the control of the Straits. For we cannot but agree with her that to comply with Russia's new demands would inevitably lead to the disappearance of the Turkish Republic as an independent state; and it is our policy to maintain the independence of Turkey, Persia and Afghanistan as a broad neutral belt to reduce points of friction with the Soviet Union and to protect those areas in Southern Asia where we possess special interests and responsibilities.

We should support Turkey for another reason, no less cogent and more disinterested: we object to the exercise of pressure by a Great Power over a small Power for political ends. Such action would speedily destroy the new order of peace and security which we, in common with fifty nations, are trying to establish. In this endeavour we enjoy, for the first time, the powerful and persistent support of the United States. The visit last summer of the battleship *Missouri* to Istanbul—a visit which aroused extraordinary but comprehensible enthusiasm in Turkey—was followed by that of successive squadrons of United States warships. These fleet movements were an unmistakable hint to Russia that the United States has no intention of tolerating





*For 235 miles the Turkish Straits divide Asiatic from European Turkey; the Bosphorus, between Constantinople and the Black Sea, is in places only half a mile wide. (Above) The Bosphorus, near Robert College, which has provided American educational facilities for two generations of Near Eastern youth. (Below) Rumeli Hissar, the "Castle of Europe", was built by Mohammed II to close the Straits before he took Constantinople in 1453*







*Modern Turkey sunning itself on one of the many beaches near Istanbul—a far cry from the Oriental seclusion that once invested the Sultan's ladies at Seraglio Point, visible in the background*

any offensive move against Turkey—a co-signatory with Russia herself of the Charter of the United Nations. Finally, on March 12 this year, President Truman, in a special message to Congress, recommended the employment of American funds and military and civil equipment in assuring the independence and economic stability of Turkey. Free peoples, he declared, must be assisted to maintain their free institutions and national integrity against the pressure of totalitarian régimes. The Bill embodying this recommendation was passed by nearly three to one majorities in both Houses of Congress.

The Turks, confident that they will have the support of Britain and the United States, are cool and collected. But they are taking no chances. They are said to have 750,000 men under arms (for they have not demobilized since the end of the war), and they are buying munitions where they can. I have recently returned from a visit to Turkey, and I was struck by the order, the unity, the political stability, the optimism and the resolution of her people.

#### THE RUSSIAN CASE

We have now surveyed Russia's long years

of effort to solve, to her satisfaction, this ancient problem of the Straits. How then can her case be stated? An informed Russian student of affairs might answer somewhat like this:

"The territory of the Soviet Union forms by far the largest land mass in the world under a single government. It is nearly four times as large as Europe (without Russia), and two and a half times as large as the United States. Yet this enormous country of ours is woefully lacking in serviceable outlets to the open sea. Our long northern coast is bound by Arctic seas. On the south we are shut in by Turkey, Persia, Afghanistan, India, Tibet and China. Most of our great rivers flow from the heart of the country northward into the Arctic, and are almost inaccessible from the sea. Our only up-to-date and active harbours are at opposite ends of the huge, elongated land mass—5000 miles apart.

"The principal outlets for our foreign trade are at the western end—the ports of the Baltic and the Black Sea. But both these seas are connected with the outside world by narrow waterways—the Kattegat and the Turkish Straits—which can be closed with ease on a threat of war. Then our ships are bottled up

and we are cut off from the aid of allies and the sustenance of friendly neutrals. This is no fanciful picture. It has happened twice within a generation.

"Thus", our Soviet friend might continue, "the greatest land mass in the world, possessing incalculable wealth, with a virile and prolific population of 190,000,000, is constricted and confined; is deprived of exits; possesses no windows from which it can look out. Is it then surprising that we Russians, desiring to expand, to play a part in the world commensurate with our increasing power, suffer continually from a kind of claustrophobia?"

"Our Black Sea ports are among the most valuable that we possess. Unlike the Baltic ports, which are generally frozen in winter, they are ice-free. They serve some of the richest wheat lands of the world—"

Here, nodding vigorously, I might interrupt him: "I remember," I could say, "as a boy, watching the tramp ships (two, three, four, five, six in sight at a time—struggling against the Bosphorus current, the red showing deep on their sides, their propellers thrashing the blue water into white) on their way north to get the Russian grain. I knew that in a few weeks the same ships would reappear (all black now, deeply laden, moving down swiftly with the current, their screws hidden in writhing water) bound for the grain harbours of the west—Liverpool, London, Antwerp, Hamburg, Rotterdam."

"But" (he might add) "these Black Sea ports are only partly ours. For the key to them is in the hands of Turkey—a weak and backward state. We consider it humiliating and unjust that she should have the right to lock the gate upon the seaborne trade of a hundred million people. We maintain that the Straits should be in the hands of the Black Sea Powers, of which Turkey would be one. Such a combination would be capable of resisting pressure from a non-Black Sea Power which might choose to disregard existing covenants or conventions. For we have not forgotten that Turkey has fought against us, off and on, for three centuries, and that she has been used on two occasions as a spring-board for a combination of Great Powers for an attack on our territory. If she remains in sole control of the Straits, what guarantees have we that this might not happen again?"

"We remember, too, that in the two World Wars the short and easy line of contact with our allies which ran through the Straits was denied to us. In World War I, Turkey joined our enemies. Our allies attacked the Dardanelles and made desperate efforts to break

through and bring succour to our sorely tried armies. They failed, and we, deprived of their assistance, succumbed. In World War II, although Turkey had signed a Treaty of Alliance with Britain and a Treaty of Friendship with us, she asserted that she was neutral and closed the Straits to Russian and Allied warships alike. By so doing, she compelled her ally Britain to send the convoys to us through the hazardous and icy Arctic, and to open a long, slow and costly line through Persia. The delay nearly cost Russia her existence. We are determined, therefore, to prevent the same thing from happening again."

That, or something like it, would be the Russian case. Nothing would be said about *possession*; "joint defence of the Straits" is the formula.

#### THE TURKISH CASE

To this exposition of the Russian case, an informed and persuasive Turk might reply:

"You have said, sir, that we Turks have fought against you for upwards of three hundred years. That is true. But who was the aggressor? We built an empire and you laboured ceaselessly to destroy it. You did it piecemeal, filching something from us after every war. Finally in 1918, Britain, with your help, finished the job.

"We do not regret the loss of our empire. We have done with imperialism. In 1919-1922, when everything seemed lost, we succeeded, by desperate efforts, in snatching from the wreck our Anatolia—the Turkish homeland—with Istanbul and a part of Thrace. These we shall preserve intact as long as a single Turk remains alive. This is a simple, fundamental truth, about which every Turk has long ago made up his mind. If only you Russians would realize that, how much simpler the problem would become!

"You have pointed out that the Straits have been used on at least two occasions as a base of attack upon your territory by one or more of the Great Powers, acting with us. You referred, of course, to the Crimean War and to the bombardment of your Black Sea harbours by German warships in October 1914. You stated that what has occurred twice, might well occur again.

"We can understand your anxiety; but it is an anxiety which does not seem to us to differ from the normal preoccupation of all governments with questions of security. These pre-occupations must exist so long as frontiers exist, and so long as the present chaos in international relations continues.

"In your recent diplomatic notes to us, you



have for the first time expressed the desire to share with us in the 'defence of the Straits'. What do you mean by that? The phrase can have only one meaning. It can only mean that you, a foreign Power, desire to possess military bases on our territory in the area of the Dardanelles, to which your warships and your transports would have access at all times through the Bosphorus and the Marmora; with Istanbul at their mercy.

"By what right do you lay claim to these bases? We have been in possession of the Straits for five hundred years—longer than you have been a state. Our sole guardianship over them has been admitted in treaty after treaty bearing the signatures of all the

Great Powers of Europe. There is no international principle more firmly established. You spoke of injustice and humiliation. But what can be more unjust and humiliating for us than to have your soldiers permanently in occupation of powerful bases on our territory, with Istanbul under the guns of your warships?

"Not only would this be an infringement of our sovereignty. It would be a threat to our independence. Our Eastern frontier already marches with yours. If we were to allow you to establish yourselves on our territory in the West, we should be squeezed between the two arms of the Russian pincers, and we should inevitably become a vassal of Russia. You

*The maritime might of America supports Turkish resistance to Russian pressure. (Below) In front of Dolma Baghche Palace, where Grand Duke Nicholas landed in 1878 (see June number, page 72), American Marines paraded in 1946. (Opposite) The Turkish cruiser Yavuz, from the flight deck of the U.S. aircraft-carrier Leyte, which with other American warships visited Istanbul in May 1947*

courtesy of the Turkish Embassy





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already dominate 20,000,000 Turks in your Caspian and Transcaspian provinces, which makes you the greatest Turkish Power in the world. To us, your demand for bases on the Straits means that you dream of becoming the only Turkish Power.

"We admit that the Montreux Convention—solemnly signed by nine states, and based upon the ancient and admitted principle of Turkey's guardianship of the Straits—may now be partly out of date; but we are not prepared to discuss the revision of an international instrument with you alone. The other signatories (except the defeated Powers) as well as the United States, must be heard.

"If you would be prepared once and for all to forgo your demand for bases and to respect our territorial integrity (which you solemnly undertook to do when you and we

signed the Charter of the United Nations), we believe that a way could be found of solving this age-old problem: a way which would relieve you of your anxiety lest the Straits be used as a base of attack against you; and which would allow your merchantmen and ships of war to pass the Straits freely on their lawful occasions: a way, also, which would guarantee our Istanbul and our Straits against attack from either the Black Sea or the Mediterranean.

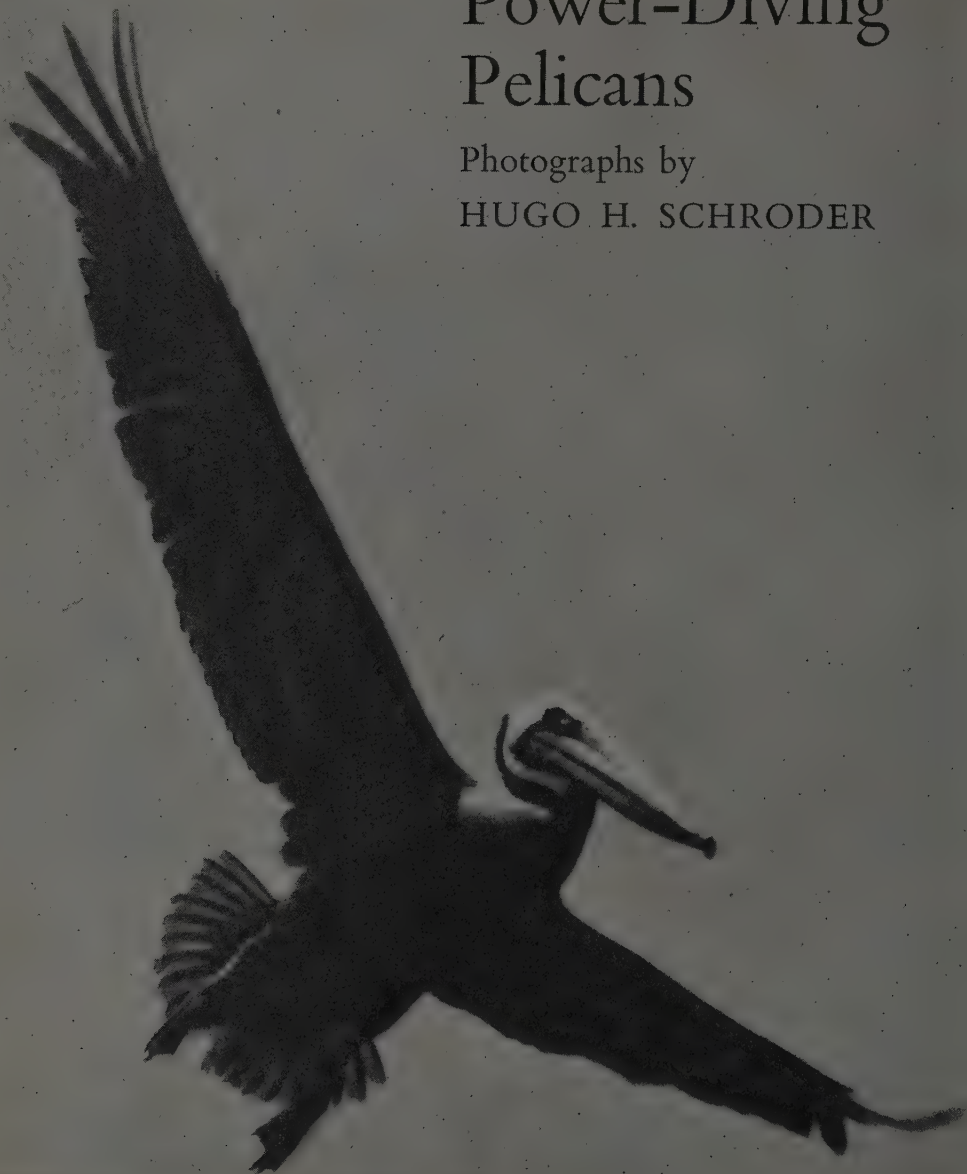
"The plan has the merit of simplicity. It is that Turkey should be appointed Guardian of the Straits on behalf of and responsible to the Security Council of the United Nations. Turkey would not regard that as an infringement of her sovereignty. She would, on the contrary, accept it as an added guarantee of her security and her independence."



# Power-Diving Pelicans

Photographs by

HUGO H. SCHRODER



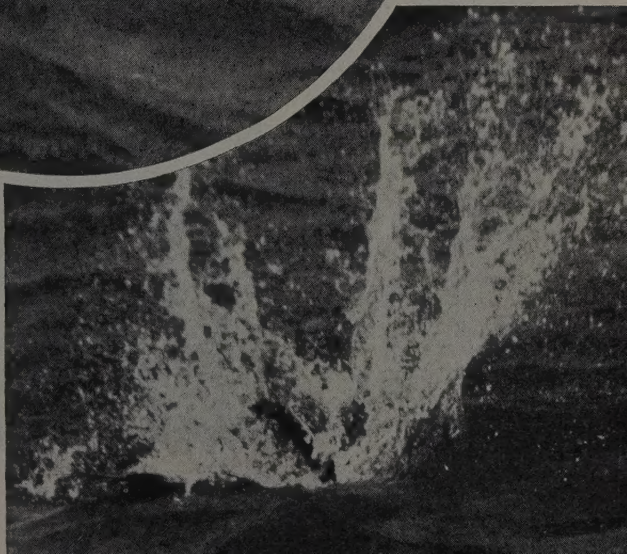
*The Brown Pelican, whose plumage is handsomely varied with black and white, makes its home off the coasts of Southern and Central America and the West Indies. Most pelicans hunt in parties, driving a shoal of fish into shallow water and scooping them up in their great pouches. But the Brown Pelican dives for its dinner, soaring on its reconnaissance flights with wings fully extended, like the twenty-pound bird shown above*



*A power-diving pelican in action! After sighting a shoal of fishes, it 'peels off' from the flock and nose-dives onto its prey in bomber style. This skilled performance is seldom photographed, for it takes place in deep water, usually well out to sea*



*As the pelican's heavy body hit the water at tremendous speed, the shock of impact was broken by an air-sac on its breast. The last visible sign of the bird was its wings; then, with a final splash, it disappeared from sight—but only for a moment*







*When the pelican emerged again, there was one fish less in the ocean! We can almost detect a satisfied smirk as it rises with ease from the water, prey in pouch, and flies off in search of another shoal, probably to satisfy the appetites of a hungry family*

*The pelican rookery may be many miles away, for pelicans always prefer to do their hunting far from their bulky nests. These are usually built in low trees on islands in the coastal lagoons, where Brown Pelicans breed in large colonies, sometimes a thousand strong*





# The Compassionate Lamas

*The following episode is extracted from Tibetan Venture by André Guibaut, which John Murray will shortly publish. It took place in a remote part of north-eastern Tibet, inhabited chiefly by an "ensemble of nomads" of whom the Ngolos are the most important tribe. These independent herdsmen live at an altitude of as much as 15,000 feet in summer, descending to 12,500 in the winter; at about 11,500 feet, in the deep valleys, their upper world meets the world of sedentary people, whose stone houses of fortress-like construction bear witness to the general state of insecurity. "It is unusual to travel more than three or four miles without finding a monastery of several hundred lamas, erected usually on mountain spurs, in sites chosen both for their beauty and for their strategic position." The monasteries to a great extent control relations between the upper and lower worlds, exercising economic power as well as moral authority. But this does not deter the tribesmen from banditry; and at the moment described, in September 1940, the author's only European companion had recently been killed in an ambush by bandits. The Royal Geographical Society has awarded M. Guibaut the 1947 Cuthbert Peek Grant for his exploration in Tibet and Burma*

ALL this time the rain kept falling and falling, a fine, drizzling, penetrating rain which drowned the countryside and transformed this valley-bottom into a marsh. And at regular intervals I would hear the faint, mournful, obsessing call of the shell-trumpets, a sound which for the last few months had marked all the stages of my life and which still sent a shudder down my spine.

At the sound of the trumpets the lamas would rise obediently and proceed in single file over the light cantilever bridge which straddled the angry, roaring river at a point artificially narrowed to lessen the span. I would see them passing under the large, tattered black and white drapery of the porch which flapped in the breeze, and disappear into the cosy darkness of the temple. The evening service, held between five and six o'clock, was the most frequented of the ceremonies; it left the whole village empty, apart from the houses in which the few female members of the population lived.

One day, at an hour when the settlement appeared deserted, an incident occurred which was to bring the atmosphere of tension to a climax. The weather had suddenly cleared, and through a rift in the ceiling of clouds a weak sun had appeared, restoring light and shade to the general grey of the landscape and casting its rays here and there against the copper ornaments of the temple. Suddenly strident cries broke the silence, the cries of a female voice. Someone, probably my hostess herself, the woman lama who was praying away on the flat roof of the house, had just given the alarm signal to the monastery.

I had a vague feeling that the business concerned me, so I walked to the door with my two men, my hand on the butt of my revolver, with its poor complement of four cartridges.

A wave of terror seemed to have swept over the village. People were rushing out of their houses with guns and sabres, running this way and that, without quite knowing what they were doing. On the far bank of the river four or five men on horseback were jostling each other in an attempt to cross the narrow wooden bridge, while on the right bank where our house lay, men were urging them on with shouts and cries. They very soon vanished into the forest and I heard two shots ring out.

I still did not understand what was happening, and looked in amazement at Yong Rine who, rifle in hand, was himself rushing towards the forest. Tchrachy, still disabled, had remained at my side, and I tried to read in his agonized expression the reason for the excitement.

In the meantime the woman lama had descended from the roof. She was still stripped to the waist. Her face was contorted, and she looked at me wide-eyed, with an extraordinary expression of mingled affection and rage. Forgetting that I could not understand her, she jerked out incoherent phrases at me, half furious, half pitying. And all the time she kept trying to push me back into the dark depths of the house.

I resisted her, for I was determined at all costs to find out what fresh disaster had befallen me. The extraordinary creature then seized me by the wrist and, dragging me a few steps forward, pointed at the spot in front of the house where, a few minutes before, our horse had been quietly grazing. There was nothing now but a leather thong fixed to a peg, trailing in the grass. The horse had disappeared. Some man, probably ambushed in the forest, had waited for the evening service and then leapt out, cut the leading-string, mounted the horse and made



off with the only means of transport which remained to the caravan. The good woman had been a helpless witness of the scene, and was now in a state of frantic rage, mingled with sorrow and pity for my misfortune.

This fresh blow of fate left me stunned. Once more the vague threats, the latent dangers were materializing, taking human shape and growing out of all proportion.

But I really believe that this strange nun with the pendulous breasts and shaven skull was more affected than I by the disaster, and that if in her fury she had caught the thief she would have torn his face, gouged out his eyes and bitten him through the heart. She rushed to the little chapel in her house, up to the private altar, and returned trembling and transfigured, holding in her clenched right hand a copper bowl containing holy water. Then, buttressed on her straddled thighs as though to brace herself for a supreme effort, her body and head thrown backwards, her right arm outstretched with all its sinews taut, she yelled out into the air, in the direction where the thief had disappeared, the curse intended to nail him to the spot, with invocations to the genii, spirits and demons of the mountains, forests, streams and gorges to unite together in a hurricane. Then, with these curses on her lips, she flung out the contents of the copper bowl towards the horizon in a thrice-repeated frenzied gesture, while I, for my part, clutched hold of the door-frame and screwed up my eyes as though expecting an explosion. If at that moment lightning had struck the forest and the earth had opened to release the serpent-crowned Furies from Tartary and all the demons of Hell, I believe that it would have appeared to me more natural than the silence which ensued.

As I watched this old, hairless, half-stripped woman, glowing with malevolent purpose, I realized for the first time in my life how one can become mad.

Quite dazed, I went and sat down beside the fire where I found Tchrachy, pale and silent, mechanically poking the embers.

An hour passed. Silence once more reigned in the monastery. Then Yong Rine returned, covered in mud, tired and empty-handed. Apparently the thief had mysteriously disappeared just as his pursuers were catching up with him. In Tibet this was quite enough to start a legend, and in the light of the fire I saw an expression of fear in the eyes of those around me. I felt that they could not look at me without thinking of the curse which I had brought upon them. These good lamas must have been fundamentally kind-hearted not to have flung out my ill-omened person then and there.

This incident had brought the tension of the monastery to a climax. That evening we barricaded ourselves in the house, the most outlying house of the settlement, waiting for a sudden irruption to kidnap or kill us. Our hosts, the lama and his mother, were prepared to share the night's misery with us, and were even tactful enough to keep up a show of gaiety. The man kept trying to teach me the names of the various objects used to prepare their meagre fare, and to please him I repeated the words over and over again, trying to copy the impossible pronunciation of the Ngolo tongue. His mother would watch for a smile to cross my face, and whenever she succeeded in cheering me she would chuckle delightedly and seize my hands in hers. The same performance had been repeated every evening since our arrival. . . .

And so passed these aimless days, interrupted only by the tokens of goodwill with which I was constantly embarrassed. Not an hour passed but a lama would visit me, bringing me some present or other to express his sympathy. They would come singly or in pairs, shy and reluctant to cross the threshold, holding in their cupped hands paltry little objects which touched me so much that they brought tears to my eyes; little portions of butter, handfuls of salt, tobacco strands, dried fruits which I could neither swallow nor identify, and above all, what I most appreciated, large pots of curdled milk. They would remain there some time, squatting in front of me, replying to my gestures of thanks by noddings of the head, thoroughly enjoying having done a good deed, while I stood tongue-tied before them, unhappy not to be able to express my gratitude in intelligible terms.

I had only one thing to offer them in return for their kindness, and that was the use of a pair of binoculars which Yong Rine was carrying at the moment of the attack, and which he had managed to save. When the weather was clear they would point the binoculars towards the grassy foothills of the mountains where the nomads' yaks were browsing, screaming with joy at seeing the distant animals brought suddenly close to them. Then they would make the inevitable experiment with the louse. Someone would search his clothes for one of these insects, of which Père Huc says that "in Tibet they are easier found than butterflies"; he would then walk a little way away, holding the louse in his hand, while the observer would try and focus the creature through the instrument. They were disappointed and could not understand why this device which could attract a yak had no power at all over a louse.